Occurrence of *Exoteleia burkei* in the Sierra Nevada (Lepidoptera: Gelechiidae).—During June 1965, dying shoots infested with small lepidopterous larvae were observed on knobcone pines, *Pinus attenuata* Lemm., growing at the Institute of Forest Genetics, Placerville, El Dorado County, California.

Adults reared from the shoots were identified by J. A. Powell, University of California, Berkeley, as *Exoteleia burkei* Keifer, which had been reported only from the vicinity of the San Francisco Bay area, and from Monterey pine, *P. radiata* D. Don, and Digger pine, *P. sabiniana* Dougl. (Keifer, 1931, Pan-Pac. Entomol., 8: 61–73; Burke, 1937, Proc. West. Shade Tree Conf., (4): 21–31; Burdick and Powell, 1960. Can. Entomol., 42(4): 310–320). The previous easternmost record for *E. burkei* was from the Coast Range in eastern Alameda County (Burdick and Powell, 1960). Powell[1] has since reared *E. burkei* from *P. coulteri* D. Don from the La Panza Range, (part of the Coast Range) San Luis Obispo County, and Brown and Eads (1967, Calif. Agr. Exp. Sta. Bull. 843, 72 pp.) report that it commonly infests *P. radiata* in Southern California. The Sierra Nevada observation represents a range extension of about 100 miles eastward, but whether the species is in fact new there or merely previously unnoticed is not known. Neither is it known if *E. burkei* is more widely distributed east of the Central Valley.

Knobcone pine is native to the Placerville area; however the infestation that I observed was in a small plantation used for tree breeding work. The infested trees were from 20–30 feet tall. Ponderosa pine, *P. ponderosa* Laws., is the predominant native pine species at Placerville; sugar pine, *P. lambertiana* Dougl. and Digger pine also occur naturally. Indeed most species of *Pinus* are represented in the Institute's plantations, but only *P. attenuata* was observed to be infested.

Previous authors have reported a number of larval habits for *E. burkei*, including needle mining, feeding in staminate cones, and boring in the developing shoots. At Placerville only the last habit was noted, but the early instar larvae were not seen. It appeared that a single shoot was mined by each late-instar larva. Generally, only one larva occupied a shoot, but there were rare instances of multiple infestation. The shoot was thoroughly mined out for a distance of 3.5–5.0 cm back from the tip. Needle bases were also mined out from within the shoot, and the needle bundles were thus cut off within the fascicle. Needle elongation was less than 2.0 cm when growth was halted as a result of larval activity.

Contrary to the assumption of Burdick and Powell (1960) that larvae leave the feeding site to pupate, pupation in this instance took place within the mined shoots. The pupa was most often found head outward in a mined-out base of a needle bundle but occasionally one was found within the shoot itself. Before pupating, the larva cut a hole in the needle sheath from within to provide for egress of the adult, and also built a silk ramp inside to direct the adult out the hole.—ROBERT E. STEVENS, *Rocky Mountain Forest and Range Experiment Station, Fort Collins.*[2]

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[1] Personal communication, October 17, 1968.

[2] Central headquarters maintained at Fort Collins, in cooperation with Colorado State University. At the time these observations were made, the author was on the staff of the Pacific Southwest Forest and Range Experiment Station, Berkeley, California.